

Remarks/Arguments:

This is a reply to the office action of December 24.

The examiner correctly objected to the drawings because they did not show the feature recited in claim 4. In response, we have canceled claim 4.

We have amended claim 1 to better distinguish the invention from the prior art of record. Claims 1 and 14 have also been amended by changing “distribution” to “closing”. Both those terms were used in the specification to identify plate 16. The amended claims use the term “closing” consistently.

Editorial changes have been made in claims 8, 10, 14 and 15.

In the action, the examiner cited a new document US 6739527 (Chung) and held that Chung anticipates claims 1, 6 - 9, 11, 14 - 18.

We request reconsideration, considering the changes made to claim 1 above, and the following comments.

Chung discloses a shower head comprising two plates (water outlet seat 30 and locking disk 50) axially facing each other, with a gasket or seal (water stop flange 41) inserted between them. Moreover, Chung discloses a closing ring (locking flange 31) coaxially mounted with the seal and comprising a wall extending to the top of water outlet seat.

The examiner reasoned that the closing ring has an axial thickness smaller than the axial thickness of the seal when at rest. But this is true only if the locking flange 31 alone is considered to be the closing ring. In that case, it is not true that the seal

expands radially into contact with an internal wall of the closing ring which faces toward the collecting chamber.

On the other hand, if the closing ring is considered to be the locking flange 31 *plus* the wall extending to the top of the water outlet seat, then the closing ring cannot have an axial thickness smaller than the axial thickness of the seal when at rest. Note that in this second option, the seal is in contact with the internal wall of the closing ring, but it does not radially expand against it, as explained more fully below.

Therefore, claim 1 is novel over Chung, because of the following features in claim 1:

- (1) The dispensing and closing plates are plane and parallel to each other; in Chung the plates 30, 50 are not planar: in fact, the plate 30 has an urging ring 32 and plate 50 has a protruding ring 51.
- (2) the seal is “pinched in compression between said dispensing and closing plates”. In other words, the surfaces acting axially on the seal are plane and parallel to the plates; therefore the seal is axially deformed and it can radially expand against the internal wall of the closing ring; in Chung the seal, or better the water stop flange 41, is pinched between an oblique urging section 411 and an oblique resting face 511. Therefore, there is no radial expansion of the seal against the lateral wall of the closing ring.
- (3) The closing ring is mechanically separate from the plates: in other words, it is not integral with the plates. The technical effect is to reduce cost because now shower heads can be produced by only cutting components from metal sheets, i.e., the dispensing plate, the closing plate and the closing ring.

With respect to Chung, the main differences are that the shower head of the present patent application comprises two plane plates and a seal directly and axially pinched in compression between them. There are no protrusions in the plates in order to compress the seal; the plates, in fact, are cut from plane metal sheets.

The seal is pinched axially by plane sheets, not by oblique protrusions; in this way the seal can radially expand against the lateral wall of the closing ring, which controls the deformation of the seal and ensures water tightness. In Chung, the seal is pinched in compression by two oblique faces 411 and 511 and there is no radial expansion against the lateral inner wall of the closing ring. The lateral wall of Chung's closing ring does not control the elastic deformation of the seal.

For the foregoing reasons, we submit that Chung does not anticipate or render obvious claim 1, or the claims which depend from it.

Favorable reconsideration and allowance of this application are requested.

Respectfully submitted,

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